

Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. Applicant/Contact name and address: Sweet Grass County Conservation District, P.O. Box 749, Big Timber, MT 59011
2. Type of action: Conservation District Application to Change Water Reservation 43B 30110388
3. Water source name: Yellowstone River
4. Location affected by project: Sections 20 and 21, T1S R17E, Sweet Grass County
5. Narrative summary of the proposed project, purpose, action to be taken, and benefits:
The Sweet Grass County Conservation District proposes to add 22 AC in Sections 20 and 21, T1S R17E, Sweet Grass County to their water reservation (43B 9948-00). Water would be diverted from the Yellowstone River by a pump in E2NWSE Section 20, T1S, R17E, Sweet Grass County at a flow rate of 4.90 CFS up to a volume of 84.0 AF for flood irrigation. The benefit to the producer (Glenn and Vicki Warren) is to increase agricultural production. The benefit to the Sweet Grass County Conservation District is to fulfill the purpose for which the water reservation was granted. The DNRC shall issue a change authorization if an applicant proves the criteria in 85-2-402 MCA are met.
6. Agencies consulted during preparation of the Environmental Assessment:
(include agencies with overlapping jurisdiction)
Montana Department of Natural Resources and Conservation
Montana Department of Fish, Wildlife and Parks
Montana Department of Environmental Quality
Montana Natural Heritage Program
Montana Sage Grouse Habitat Conservation Program
United States Fish and Wildlife Service
United States Natural Resource Conservation Service

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity – The Montana Department of Fish, Wildlife and Parks lists the Yellowstone River between the Bighorn River and Springdale as periodically dewatered. The proposed diversion is small relative to normal flows in the Yellowstone River and was authorized by the Board of Natural Resources in the Order of Board of Natural Resources Establishing Water Reservations dated December 15, 1978, implying that the water was considered available by the Board. Diversion of additional water from the Yellowstone River has the potential to worsen the periodically dewatered condition. The Montana Department of Fish, Wildlife and Parks holds Statements of Claim and a water reservation that are senior to the Sweet Grass County Conservation District water reservation and can make call on the river if dewatering occurs.

Determination: No significant impact.

Water quality – The Yellowstone River in Sweet Grass County is not listed as threatened or impaired by the Montana Department of Environmental Quality. The river has a use-class of B-1 meaning it is suitable for all uses with conventional treatment. Withdrawal of 4.90 CFS from the Yellowstone River is unlikely to change the water quality. The proposed irrigation method is flood. Low efficiency irrigation increases the likelihood that return flows could degrade water quality.

Determination: No significant impact.

Groundwater - The proposed project would increase groundwater supply locally by infiltration of irrigation water. The amount of infiltration likely to be high under flood irrigation but quality of the infiltrated water is unlikely to be affected.

Determination: No significant impact.

DIVERSION WORKS – The diversion works for the proposed project are a pump in the river feeding approximately 80 feet of pipe to an existing open ditch. Placement of the pump may cause minor disruption of channel banks or riparian environment. The diversion works have little possibility of creating barriers to wildlife or modifications to channel flow.

Determination: No significant impact.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species – According to the Montana Natural Heritage Program there are no plant species of concern in the project area and 14 animal species of concern. The animal species of concern considered sensitive by the United States Forest Service or the Bureau of Land Management include the Black-tailed Prairie Dog, Verry, Sage Thrasher, Brewer's Sparrow and Yellowstone Cutthroat Trout. Because the land proposed for irrigation is already in agriculture and minimal diversion or conveyance facility construction is proposed, the sensitive species will not be adversely affected and there will be no change in available habitat. Mapping from the Montana Sage Grouse Habitat Conservation Program shows that the project area is not in delineated Sage Grouse habitat.

Determination: No significant impact.

Wetlands – Mapping of wetlands by the United States Fish and Wildlife Service shows wetlands in the area of the project limited to the floodplain of the Yellowstone River, specifically side channels and bar areas.

Determination: No impact.

Ponds – There are no ponds in the area of the project at present and no ponds are proposed.

Determination: No impact.

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE – Mapping by the United States Natural Resource Conservation Service shows that the soil in the project area is almost entirely Fairway loam with low slopes. This soil is a farmland of statewide importance, somewhat poorly drained, with no mention of salinity. Flood irrigation on agricultural land will increase soil moisture; however no change in soil stability or quality is predicted.

Determination: No significant impact.

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS – Existing vegetative cover is agricultural crops. Addition of irrigation will not change the vegetative cover. Installation of the pump and pipeline to the ditch has the potential to introduce noxious weeds. Control of noxious weeds will be the responsibility of the land owner.

Determination: No significant impact.

AIR QUALITY – Irrigation of existing agricultural land will have no effect on air quality. Use of a tractor pto to power the pump will create exhaust emissions.

Determination: No significant impact.

HISTORICAL AND ARCHEOLOGICAL SITES – The project is not located on State or Federal land.

Determination: Not applicable.

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY – No other impacts on environmental resources of land, water and energy not discussed above are recognized.

Determination: No significant impact.

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS – There are no known locally adopted environmental plans or goals.

Determination: No impact.

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES – The project does not create or alter any roads and there are no public roads in the area. No wilderness or recreational activities are within the project area and no land use change is proposed.

Determination: No impact.

HUMAN HEALTH – Irrigation of agricultural land has no potential to negatively impact human health.

Determination: No impact.

PRIVATE PROPERTY - *Assess whether there are any government regulatory impacts on private property rights.*

Yes___ No__**X**_ *If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.*

Determination: Not applicable.

OTHER HUMAN ENVIRONMENTAL ISSUES - *For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

Impacts on:

- (a) Cultural uniqueness and diversity? No significant impact.
- (b) Local and state tax base and tax revenues? No significant impact.
- (c) Existing land uses? No significant impact.
- (d) Quantity and distribution of employment? No significant impact.
- (e) Distribution and density of population and housing? No significant impact.
- (f) Demands for government services? No significant impact.
- (g) Industrial and commercial activity? No significant impact.
- (h) Utilities? No significant impact.
- (i) Transportation? No significant impact.
- (j) Safety? No significant impact.
- (k) Other appropriate social and economic circumstances? No significant impact.

2. *Secondary and cumulative impacts on the physical environment and human population:*

Secondary Impacts: There are no recognized secondary impacts to providing irrigation to agricultural land.

Cumulative Impacts: There are no pending or recent applications for beneficial water use in the area of the project and no cumulative impacts are recognized.

3. ***Describe any mitigation/stipulation measures:*** None
4. ***Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:*** The only reasonable alternatives are the action as proposed and the no-action alternative. The no-action alternative prevents the producer from increasing agricultural production and prevents the Conservation District from fulfilling its responsibility with respect to the water reservation. The no-action alternative does not prevent any foreseeable negative environmental impact.

PART III. Conclusion

1. ***Preferred Alternative:*** Issue a change authorization if an applicant proves the criteria in 85-2-402 MCA are met.

- 2 ***Comments and Responses:*** None

3. ***Finding:***
Yes___ No_X__ Based on the significance criteria evaluated in this EA, is an EIS required?

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action: The environmental assessment did not find any significant impacts that would occur due to the proposed project. Therefore, an environmental impact statement is not required and the environmental assessment is the appropriate level of analysis.

Name of person(s) responsible for preparation of EA:

Name: Mark Elison

Title: Hydrologist

Date: 3/8/2017